

A new deep water miter (Gastropoda: Mitridae) from the Indian Ocean

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ABSTRACT. A new species of Mitridae, *Mitra (Mitra) roselineae*, is described from deep water off Somalia and northern Madagascar. It is compared with *Swainsonia fusca* Swainson, 1824 and with *Mitra floccata* Reeve, 1844.

INTRODUCTION

In 1991 Somalia collapsed into civil war and numerous trawlers harbored in Mogadishu moved to Djibouti for security. As a result, large quantities of shells, byproducts of shrimp trawling, were put on the local market by fishermen. Among them were true rarities such as *Cypraea broderipi*, *Chimeria incomparabilis*, and many species new to science. Three specimens of *Mitra roselineae* n.sp. were found at this time in a basketful of shells. Another specimen was purchased at Diego Suarez in northern Madagascar from a local shell dealer.

Abbreviations

MNHN: Muséum national d'Histoire naturelle, Paris, France.

RAS: Richard A Salisbury, Meridian, Idaho, USA

SYSTEMATICS

Superfamily **MURICOIDEA** Rafinesque, 1815

Family **MITRIDAE** Swainson, 1831

Subfamily **Mitrinae** Swainson, 1831

Genus ***Mitra*** Lamarck, 1798

Subgenus ***Mitra*** Lamarck, 1798

Type species: *Voluta nitra* Linnaeus, 1758, by subsequent designation, Recent, Indo-Pacific

Mitra (Mitra) roselineae n. sp.

Figs 1- 5

Swainsonia fusca – Thorsson & Salisbury 2003a: 3, 15, 16, pl. 286B (not *M. fusca* Swainson, 1824).

Mitra species (correction) – Thorsson & Salisbury, 2003b: 7.

Type material. Holotype: MNHN 25857 (Figs 1-3): Length 34.9 mm, width 12.1 mm, aperture 19.0 mm. Somalia, off Ras Hafun, trawled, 150-200 meters, 1991, ex. J. C. Martin coll. # 4929B.

Paratype # 1 (Figs. 4-5). Length 30.4 mm, width 10.2 mm, aperture 16.8 mm. Somalia, off Ras Hafun, trawled, 150-170 meters, 1991, ex. J. C. Martin coll. # 4929A, RAS collection

Paratype # 2. Length 41.1 mm, width 12.8 mm, aperture 19.0 mm. Somalia, off Ras Hafun, trawled, 150-170 meters, 1991, J. C. Martin coll. # 4929C.

Paratype # 3. Length 31.5 mm, width 10.7 mm, aperture 17.5 mm. N. Madagascar, Diego Suarez, from shrimp fishing grounds, no depth recorded, J. C. Martin coll. # 7959.

Paratype # 4. Length 35.5 mm, width 10.5 mm, aperture 18.0 mm. Somalia. No collection data, Hans-Heinrich Heinicke collection.

Paratype # 5. Length 36.0 mm, width 11.0 mm, aperture 18.5 mm. Somalia. No collection data, Hans-Heinrich Heinicke collection.

Distribution. East Africa, Off Somalia, south to northern Madagascar in 150-200 meters, on shrimping grounds.

Description. Shell of medium size to 41.6 mm, elongate-fusiform, protoconch unknown, early whorls smooth with 3 to 5 punctate, spiral grooves, tiny microscopic axial grooves connect some punctations, whorls slightly convex, suture distinct, impressed with tiny crenulations on penultimate and teleoconch whorls, body whorl with 6 or 7 shallow, punctate,

spiral grooves becoming obsolete on lower body whorl. Aperture narrow, slightly longer than half total shell length, outer lip thickened, with 3 to 7 pustules on outer lip near siphonal canal, aperture smooth within, columella heavily callused, with 3 columellar folds. Siphonal notch obliquely angled, deeply notched. Base color light to dark brown, with a lighter colored band between aperture and suture, small white spots and streaks at the suture, some specimens display a distinct brown and white spiral striping on the lower body whorl. Aperture light brown background color, darker toward the outer lip; columellar folds reddish.

Remarks. *Mitra roselineae* could be confused with *Swainsonia fusca* Swainson, 1824 (Figs 6-7) which is also found in East Africa. The original description reads "Shell thick ovate, smooth, brown, spire contracted, suture minutely crenulated: outer lip thick, gibbous, smooth: pillar 4-plaited". The columellar folds number 5-6 on *Swainsonia fusca* and override the columella which is a distinguishing characteristic of most *Swainsonia* species. Additionally in the original description Swainson describes the shell as "length one inch [25.4 mm]". This is smaller than our new species which can reach 41.6 mm in length. *Mitra zephyrina* Sowerby, 1874 was described from Mauritius and is considered a synonym of *Swainsonia fusca*. *Mitra roselineae* differs from *S. fusca* in being

larger, dark brown with a distinct brown and white spiral striping on the lower body whorl, the interior of the aperture is brown versus white. This species differs from *Mitra floccata* Reeve, 1844 (Figs 8-9) in being slenderer and shiny; the interior of the aperture is reddish brown versus white. Adult specimens of *Mitra floccata* can reach 60 mm. *Mitra roselineae* is smaller to approximately 41.6 mm in length.

Etymology. Named in honor of Mrs. Roseline Martin, wife of the senior author.

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REFERENCES

- Thorsson, W. & Salisbury, R. 2003a. Living Mitridae: Chapter 10, *Swainsonia*, part 1, *Internet Hawaiian Shell News*, August 2003, Feature 1: 2-25.
- Thorsson, W. & Salisbury, R. 2003b. Living Mitridae: Chapter 11, *Domiporta*, part 1, *Internet Hawaiian Shell News*, September 2003, Feature 1: 2-16.



Figures 1-9

1-5. *Mitra (Mitra) roselineae* n. sp.

1-3. Holotype MNHN 25857, length 34.9 mm, width 12.1 mm, aperture 19.0 mm. Off Ras Hafun, Somalia, trawled, 150-200 meters, 1991, ex. J. C. Martin coll. # 4929B; 4-5. Paratype 1: Length 30.4 mm, width 10.2 mm, aperture 16.8 mm. off Ras Hafun, Somalia, trawled, 150-170 meters, 1991, ex. J. C. Martin coll. # 4929A, RAS collection.

6-7. *Swainsonia fusca* (Swainson, 1824), Cap Champagne, Reunion Island, May 1985, collected by Jean Drivas, inside of lagoon, in sand, RAS collection, size: 21.6 x 8.6 x 12.1 mm.

8-9. *Mitra (Mitra) floccata* Reeve, 1844, Cargados Carajos, N.E. of Mauritius, beached after a storm, April 03, 2002, Jacques Bertard collection, size: 56.4 x 18.0 mm (photo J. C. Martin).